



**Savannah River  
Remediation**

*We do the right thing.*

# Saltstone Enhancements



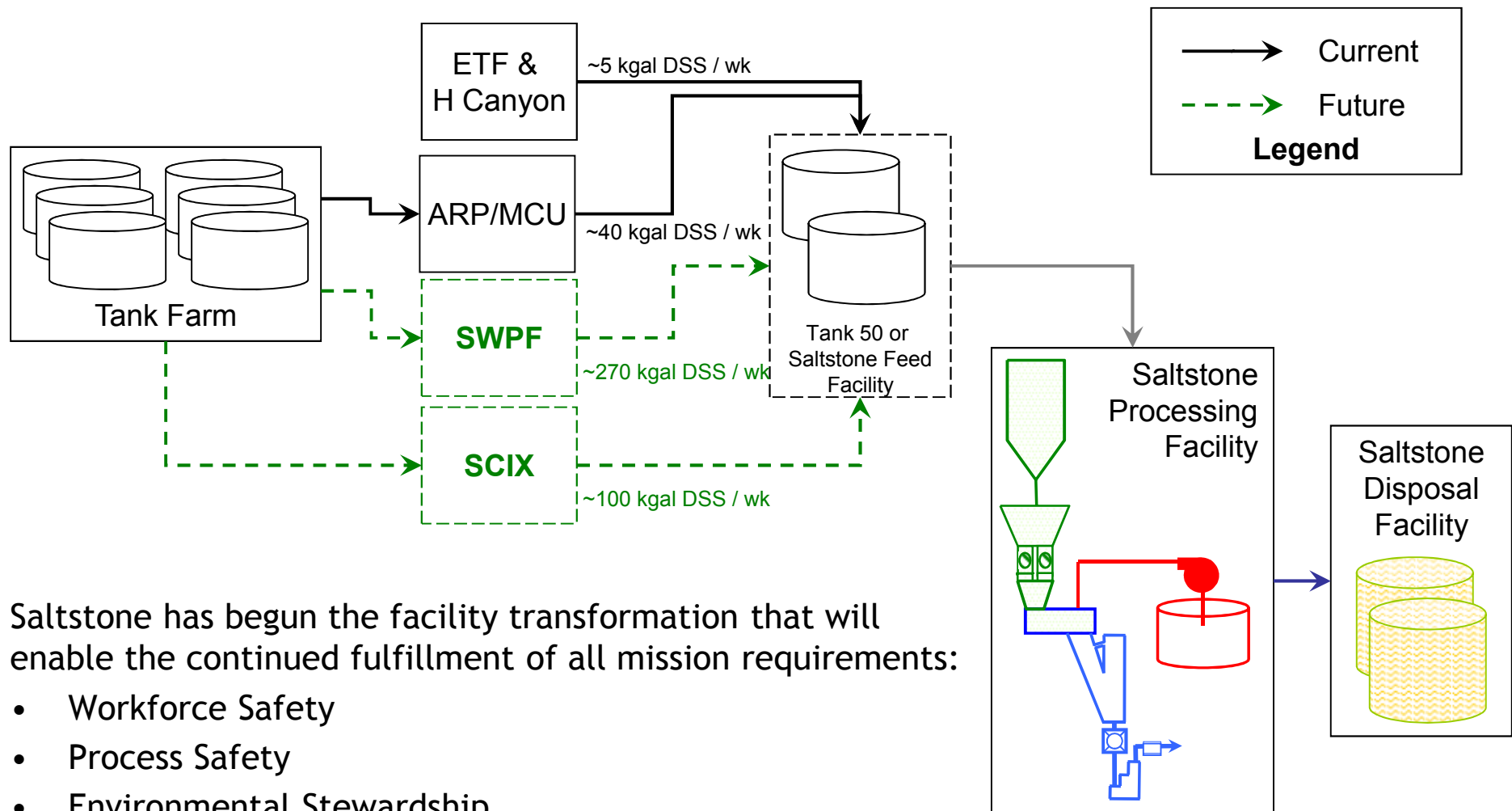
**Presentation to the Citizens Advisory Board  
January 24, 2012**

**Karthik Subramanian  
Chief Technology Officer  
Savannah River Remediation**

# Agenda

- Salt Waste Processing Flowsheet
- Current Saltstone Process
- Saltstone Enhancements
- Current Status

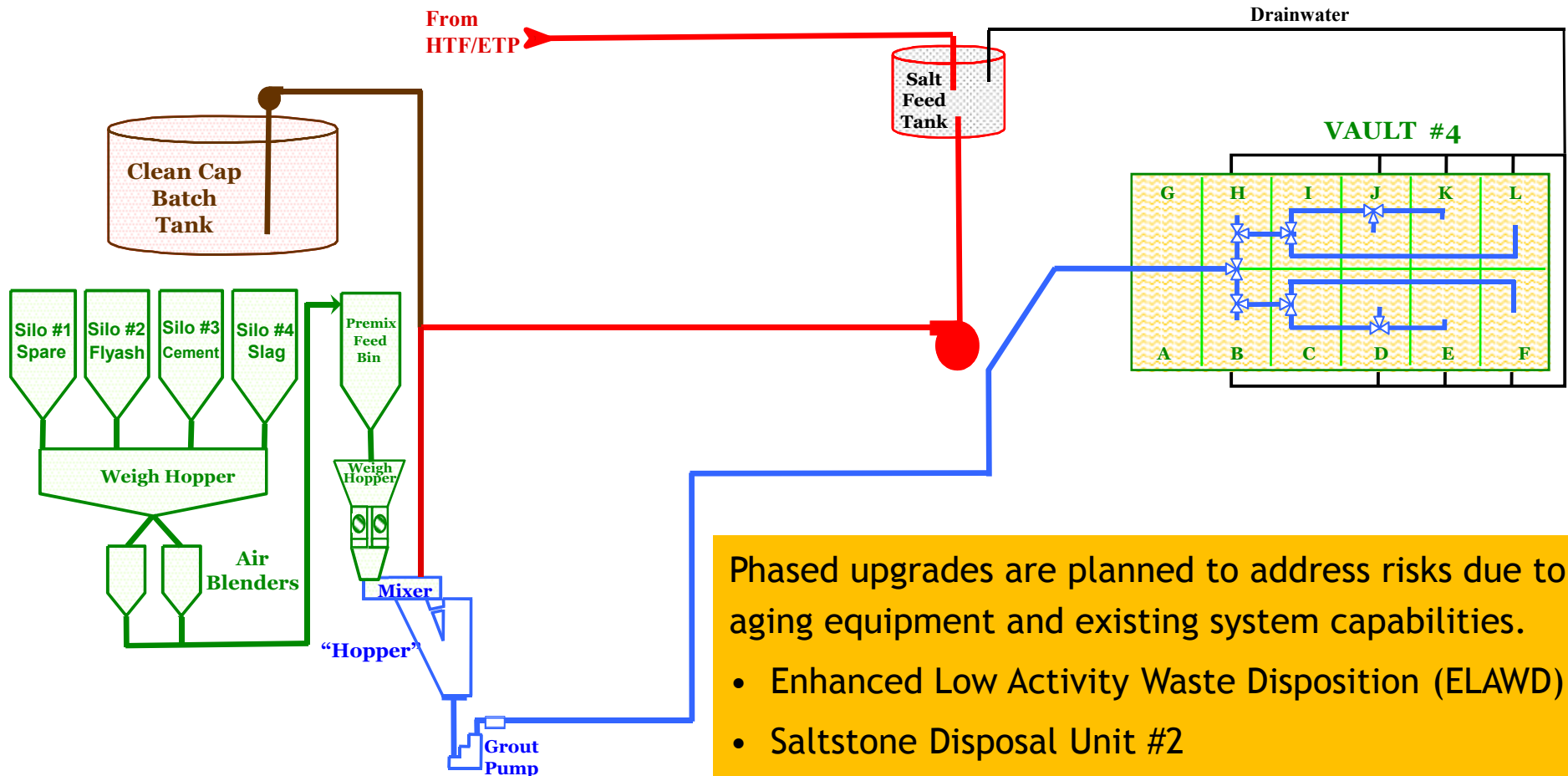
# Salt Waste Processing



Saltstone has begun the facility transformation that will enable the continued fulfillment of all mission requirements:

- Workforce Safety
- Process Safety
- Environmental Stewardship
- Life Cycle Objectives

# Current Saltstone Process



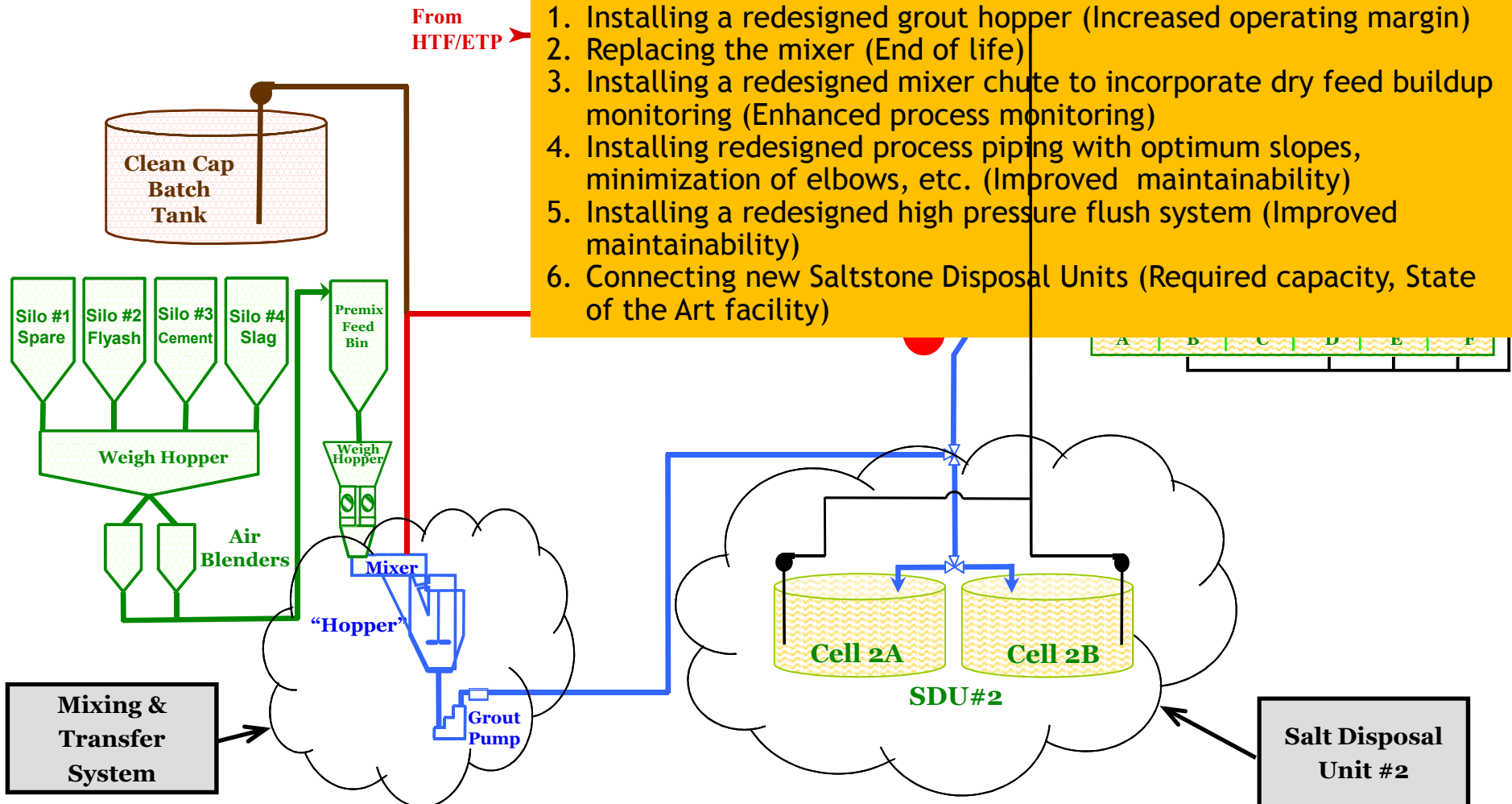
Phased upgrades are planned to address risks due to aging equipment and existing system capabilities.

- Enhanced Low Activity Waste Disposition (ELAWD)
- Saltstone Disposal Unit #2
- Salt Solution Receipt Tanks

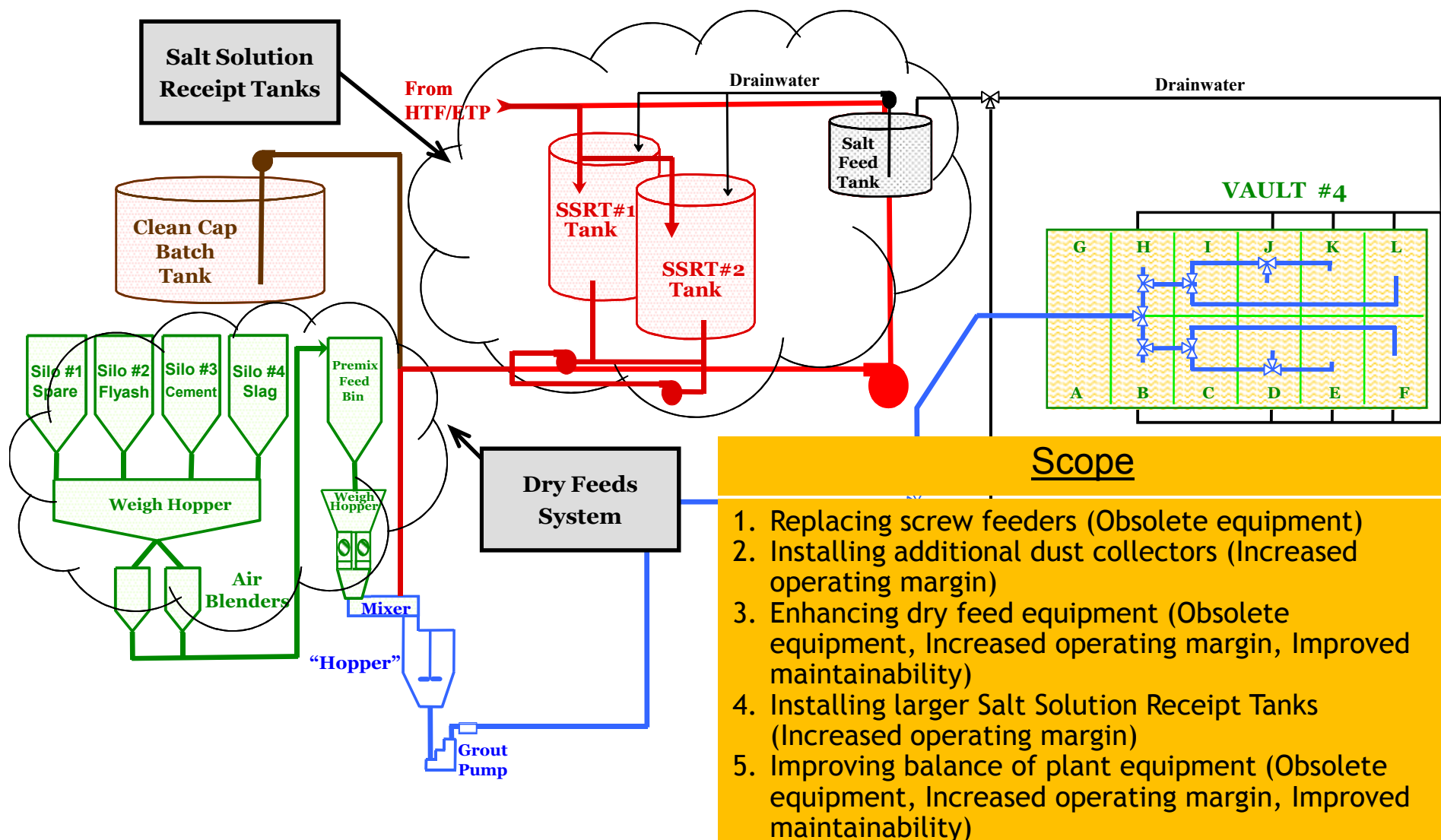
# Current Outage - Phase I

## Scope

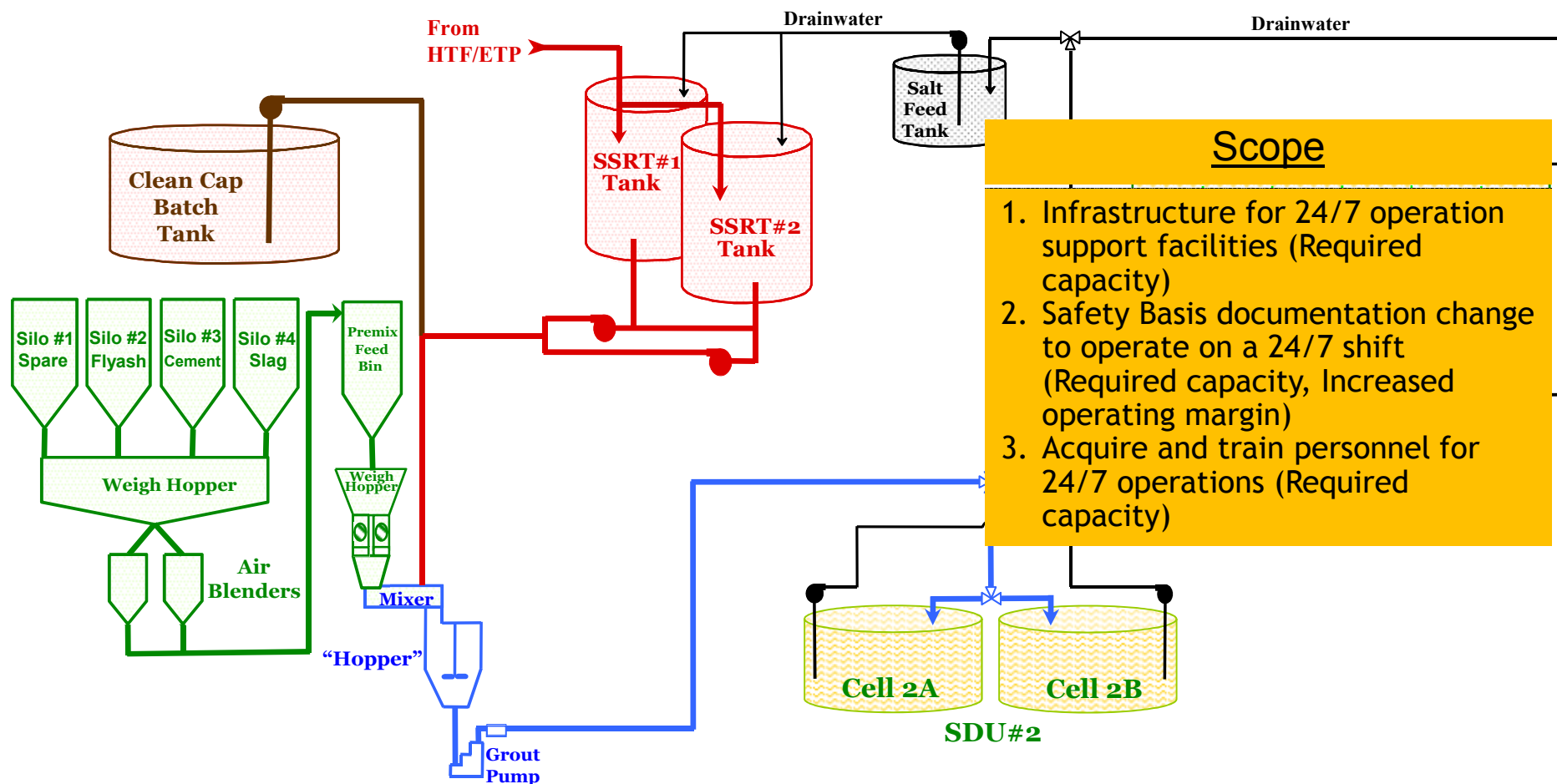
1. Installing a redesigned grout hopper (Increased operating margin)
2. Replacing the mixer (End of life)
3. Installing a redesigned mixer chute to incorporate dry feed buildup monitoring (Enhanced process monitoring)
4. Installing redesigned process piping with optimum slopes, minimization of elbows, etc. (Improved maintainability)
5. Installing a redesigned high pressure flush system (Improved maintainability)
6. Connecting new Saltstone Disposal Units (Required capacity, State of the Art facility)



# 2013 Modifications - Phase II

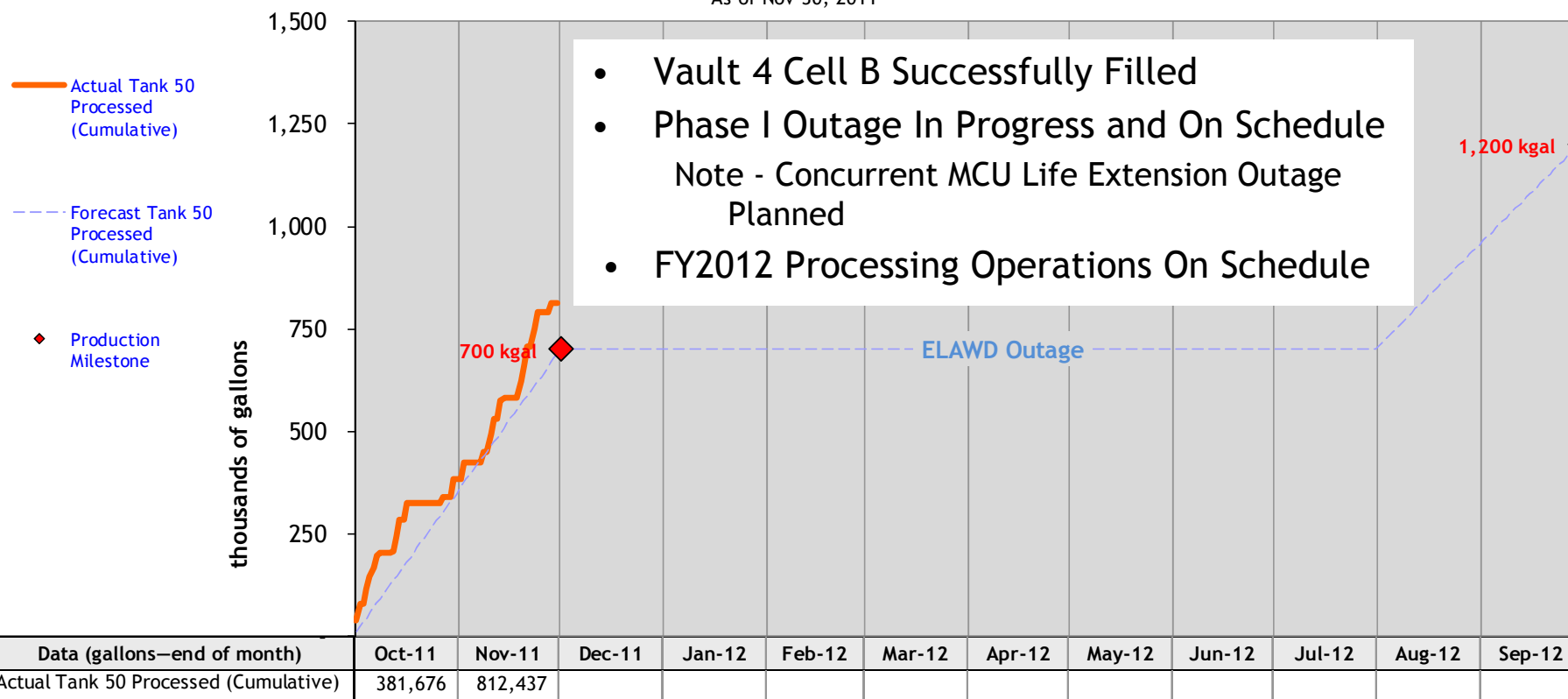


# 24/7 Modifications



# Current Status

As of Nov 30, 2011





ARP - Actinide Removal Process  
DSS - Decontaminated Salt Solution  
DWPF - Defense Waste Processing Facility  
ELAWD - Enhanced Low Activity Waste Disposal  
ETF - Effluent Treatment Facility  
HTF - H Tank Farm  
MCU - Modular Caustic Side Solvent Extraction Unit  
SCIX - Small Column Ion Exchange  
SDU - Saltstone Disposal Unit  
SSRT - Salt Solution Receipt Tank  
SWPF - Salt Waste Processing Facility